Appendix - Claims as Amended

1. (Amended) A method of screening a test compound for its ability to inhibit or enhance the binding of angiostatin to ATP synthase comprising:

i) contacting said test compound and angiostatin with ATP synthase, or [angiostatin binding portion] alpha and/or beta subunits thereof, under conditions such that angiostatin can bind to said ATP synthase, or [angiostatin binding portion] alpha and/or beta subunits thereof, in the absence of said test compound, and

ii) determining the amount of angiostatin bound to said ATP synthase, or [angiostatin binding portion] alpha and/or beta subunits thereof, and comparing that amount of an amount of angiostatin bound to said ATP synthase, or [angiostatin binding portion] alpha and/or beta subunits portion thereof, in the absence of said test compound,

wherein a reduction in the amount of angiostatin bound to said ATP synthase, or [angiostatin binding portion] alpha and/or beta subunits thereof, in the presence of said test compound indicates that said test compound inhibits the binding of angiostatin to said ATP synthase, or [angiostatin binding portion] alpha and/or beta subunits thereof, and

wherein an increase of the amount of angiostatin bound to said ATP synthase, or [angiostatin binding portion] alpha and/or beta subunits thereof, in the presence of said test compound indicates that said test compound enhances the binding of angiostatin to said ATP synthase, or [angiostatin binding portion] alpha and/or beta subunits thereof.

3. (Amended) The method of claim 1 wherein said ATP synthase, or [angiostatin binding portion] alpha and/or beta subunits thereof, is attached to a solid support.

4. (Amended) The method of claim 1 wherein said ATP synthase, or [angiostatin binding portion] alpha and/or beta subunits thereof, is associated with a lipid membrane.

5. (Amended) The method of claim 1 wherein said ATP synthase, or [angiostatin binding portion] alpha and/or beta subunits thereof, is a membrane of a live cell.

7. (Amended) The method of claim 5 wherein said cell has been transformed with a nucleic acid sequence that enclosed said ATP synthase, or [angiostatin binding portion] alpha and/or beta subunits thereof.

10. (amended) A method of screening a test compound for its ability to [modulate a bioactivity] promote or inhibit angiogenesis resulting from binding of angiostatin to ATP synthase comprising:

i) contacting said test compound and angiostatin with a cell that expresses ATP synthase, or [angiostatin binding portion] alpha and/or beta subunits thereof, under conditions such that angiostatin can bind to said ATP synthase, or [angiostatin binding portion] alpha and/or beta subunits thereof, in the absence of said test compound, and

ii) determining the amount of angiostatin required to achieve the same [bioactivity] effect on angiogenesis in the presence of said test compound as in the absence of said test compound,

wherein a reduction in the amount of angiostatin required to achieve the same [bioactivity] effect on angiogenesis in the presence of said test compound indicates that said test compound is an angiostatin agonist, and

wherein an increase of the amount of angiostatin required to achieve the same [bioactivity] effect on angiogenesis in the presence of said test compound indicates that said test compound is an angiostatin antagonist.

13. (Amended) The method of claim 10, wherein said [bioactivity is] inhibition of angiogenesis results in the inhibition of cell proliferation.

14. (Amended) [The] A method [of claim 10, wherein said bioactivity is enhancement of] of screening a test compound for its ability to inhibit or enhance proton pumping resulting from binding of angiostatin to ATP synthase comprising:

i) contacting said test compound and angiostatin with a cell that expresses ATP synthase, or alpha and/or beta subunits thereof, under conditions such that angiostatin can bind to said ATP synthase, or alpha and/or beta subunits thereof, in the absence of said test compound, and

ii) determining the amount of angiostatin required to achieve the same effect on proton pumping in the presence of said test compound as in the absence of said test compound,

wherein a reduction in the amount of angiostatin required to achieve the same effect on proton pumping in the presence of said test compound indicates that said test compound is an angiostatin agonist, and

wherein an increase of the amount of angiostatin required to achieve the same effect on proton pumping in the presence of said test compound indicates that said test compound is an angiostatin antagonist.